and long-run marginal supplies, both by agency and for the region as a whole. This approach creates an effective framework for evaluating and comparing potential impacts of a wide variety of options that will be considered and ranked through the IRWMP process. Marginal supply analysis estimates the GHGs of the energy resource(s) consumed will be carried out. The figure below illustrates relative energy intensity of various types of water resource options.

Task 6.4 Compute Baseline GHGs

Estimate Change in GHGs

Task 6.5

Task 6.6 Rank Options for Climate & GHGs

- Develop Imperial Region Water-Energy Profile
- Compute GHGs attributable to electricity & natural gas consumption
- Add estimated GHGs for mobile
 & other sources
- Deliverable: Baseline GHGs
- Apply "best available" protocols to compute the estimated range of GHG impacts of options for the forecast period [2010-2050]
- Add estimated transportation and other GHG impacts for each option
- <u>Deliverable</u>: Estimated GHGs of Priority Options
- Develop andapply ranking criteria for climate adapation and GHG mitigation.
- <u>Deliverable</u>: Map of Ranked Options

Compute GHGs attributable to electricity and natural gas consumption. The power content label of current electricity providers (IID and potentially others) will be used to estimate the amount of GHGs attributable to electricity consumption. Similarly, data about GHG emissions from natural gas providers will be used to estimate emissions attributable to natural gas consumption. Add estimated GHGs for mobile and other sources. If GHG inventories of mobile and other sources are not readily available, additional baseline GHG emissions will be estimated through a combination of interviews and research, relying heavily on studies conducted by ARB, CEC, CPUC and other state agencies for the amount of emissions that should be attributed to mobile and other sources.

- 9.5. Develop Project Screening Criteria for Climate Change. A method and criteria for evaluating the IRWMP options during the screening and review process will be established.
- 9.6. Prepare Climate Change Technical Memorandum and Briefing. A technical memorandum will be prepared to document the assessment of Imperial Region vulnerability to climate change, the review of RMS that support the Imperial Region adaption strategy, the GHG baseline, and climate change project review criteria to be used in evaluating and ranking projects.
- 9.7. Climate Change/GHG Review. Estimate Changes in GHGs. The purpose of this task is to estimate the change in GHGs of each Imperial IRWMP option being considered. Program Consultant will compute estimated range of GHG impacts of the options. For each option identified as consistent with the region's long-term water management goals, the range of GHG impacts will be estimated using best available data. To the extent readily determinable, marginal energy resource(s) supplying that marginal water would be separately identified to

more accurately estimate the respective GHG impacts. In addition, Program Consultant will identify whether energy consumed by the marginal water supply(s) is produced within the air basin or within other air basins.

Where possible, the monthly distribution of future energy requirements projected for each option will be depicted to understand the contribution of options to changes in summer peak demand. Seasonal electricity requirements in particular have different GHG profiles, since more high emissions electricity resources are needed to meet summer peak demands than for other times of the year.

The primary difference between the projected case and the Baseline GHG is that future changes in energy supplies will need to be incorporated into the methodology for estimating changes in GHGs of various water supply options. The projected energy supply mix for the energy projects that will have a water demand will be used as a basis for estimating future energy-related changes in GHGs. To the extent that other energy sources are expected to serve future water sector energy requirements, energy projections prepared by IID, CEC and CPUC for the region and statewide may be used. The next step is to add estimated transportation and other GHG impacts for each option. Estimates of other types of emissions, such as transportation fuel used for vehicles and emissions from machinery during water system operations and maintenance will be added to the Baseline GHG.

Program Consultant will develop and apply climate adaptation and GHG mitigation ranking criteria. The matrix developed under Task 6.6 will be used to prepare a visual map of preferred options. The ability of each proposed option to reduce GHGs will be assigned a numeric score from 1-5, with 1 being low ability to reduce GHGs and 5 being very high ability to reduce GHGs. Each option will be scored accordingly. The results of the scoring will be plotted on a graph to identify the leading options in context of climate adaptation and GHG mitigation. GHG scores will define the position of the option on the y-axis. Similar scores will be assigned to each option for its ability to meet climate adaptation goals. Scores for ranking the ability of each option to meet climate adaptation goals will be plotted on the x-axis.

<u>Deliverables</u>: Technical Memorandum, Assessment of Imperial Region Vulnerability to Climate Change and Adaption Strategy, Climate Change Project Review Criteria, figure and table of ranked options for climate change.

10. Economic and Financial Evaluation; Evaluation of Impacts and Benefits

The purpose of this task is to compare and contrast in economic and financial terms alternative policy and capital investment water supply scenarios intended to optimize returns to the region's water resources. The Imperial Region has very senior water rights to a relatively fixed supply of Colorado River water. These rights are fully, reasonably and beneficially used under current regional use patterns, primarily for irrigation. Though the regional economy has experienced some diversification over time, it remains heavily dependent on agriculture resulting in limited economic opportunity and persistently high levels of poverty within local communities. The nature of the agricultural economy and the

prevalence of DACs substantially constrains regional ability and willingness to pay for project development to optimize the use of existing water supplies, effectively develop new water supplies (recycling water, desalinization, etc.) and fully utilize local water rights (e.g., through groundwater storage and banking). Concurrently, greater regional economic diversification, growth and income will only be possible if reliable and affordable supplies of water are made available for new residential, commercial and industrial uses. Absent revenue and income generating opportunities (ability-to-pay) and political will to incur debt, capitalize new projects and increase water rates (willingness-to-pay), options for meeting new water demand in a manner affordable to those users ranges from reallocating water from historical uses, primarily irrigation (which faces substantial local resistance), to finding strategies to pay for new water supply development that place a reasonable financial burden on existing and future rate-payers.

Program Consulting Team will configure an array of project scenarios for consideration; collect needed associated data for input to economic and cost distribution models; evaluate local community and business enterprise ability- and willingness-to-pay and analyze and quantify economic benefits and impacts; define scenario development revenue requirements and alternate cost distribution scenarios; and evaluate regional economic affects using the IMPLAN model. This work will be facilitated through the Policy Work Group or ad hoc group. Three work group meetings are planned along with three conference calls to be held between meetings as needed. Tasks Include.

- 10.1. Define Future Project and Program Scenarios for Regional Economic Evaluation. The range of possible future water management scenarios are bookended by, 1) options for redirection of existing water supplies (Redirection Solution) and, 2) potential development projects to effectively produce new water supplies (Development Solution). Specific activities will include cost analysis, revenue modeling (ability-to-pay), water transfer/market research and modeling, and regional economic impact analysis. The results would be used to help the Water Forum understand the magnitude and potential distribution of the potential economic effects of different water RMS approaches as the Water Forum and Imperial Region communities separately and collectively seek implementable solutions to the region's future water management and supply needs.
- 10.2. Work Group Meeting Future Scenarios. A briefing and presentation on the future scenarios will be prepared to explain the analysis to the work group and Water Forum. Based on work group input, final scenarios to be tested will be configured, documented and included with the meeting notes. This input will include agreement on assumptions as to the potential endusers for water made available through scenario implementation as a basis to evaluate the potential sources of revenue to pay for scenario-associated costs.
- 10.3. Evaluation of Ability/Willingness to Pay. Analyses to evaluate: 1) region's ability to pay for new water projects and, 2) ability of individual potential residential, commercial and industrial developments to pay for new water projects. Revenue models will be developed to determine the ability of the different identified end users of 'new' water to pay for that water. The conclusions will be compared to market-based data on user willingness to pay and the

effective revenue requirements of the scenarios to determine the extent to which strategies for defraying unsupportable costs will need to be configured and explored. The analysis will consider potential impacts on ability to pay from the estimated incremental cost effects of consolidating/regionalizing planned individual community water treatment system capital improvements. The results will be summarized in a draft Technical Memorandum, Ability-to-Pay/Willingness-to-Pay

- 10.4. Work Group Meeting Ability/Willingness-to-Pay. The draft Technical Memorandum of the Task 10.3 analysis will be presented, discussed and finalized. This meeting will also be used to introduce the approach for Cost Distribution Evaluation and the Regional Economic Evaluation (see below) and to obtain input on planned analysis methods, assumptions, data to be applied and outputs.
- 10.5. Cost Distribution Evaluation. Evaluate methods to distribute estimated scenario capital and operating costs to the region's existing and future potential rate base, develop a spreadsheet tool to be used to compare how scenarios distribute costs and generate revenues needed to cover the costs of regional projects; generally evaluate mix of revenue assumptions (grants) and cost distribution structures (wholesale/retail rates; water sales; standby and availability charges; impact fees, interregional water sales, etc.). Investigate water markets to determine alternative revenue-generating strategies for defraying the gap between project development costs and local ability and willingness to pay those costs. The analysis results will be summarized in a Technical Memorandum, Cost Distribution Evaluation to the Work Group. Results will also be summarized in a written briefing and presentation to the Water Forum.
- 10.6. Assessments of potential regional economic impacts. Use the IMPLAN model to assess regional economic effects of the IRWMP (e.g., jobs, income, etc.) and benefits. The IMPLAN model structure will be adjusted, as necessary, to reflect local economic characteristics. Evaluate potential economic impacts and costs related to the redirection of existing water supplies to new uses, policy solutions to mitigate for potential resulting adverse impacts to existing users and the potential local and regional fiscal implications of the IRWMP with respect to tax revenues and public infrastructure.
- 10.7. Work Group Meeting Cost Distribution/Regional Economics. This meeting will be used to discuss the economic impact analysis results, potential strategies for mitigating anticipated adverse impacts and how the analyses may best be used to facilitate community decision-making regarding IRWMP implementation.
- 10.8. Report Preparation. Preparation of portions of the IWMP report based on the above analysis.

<u>Deliverables</u>: Briefing/presentation, Future Project and Program Scenarios; Technical Memorandum, Ability/Willingness-to-Pay; Technical Memorandum, Cost Distribution Evaluation, related briefing and presentation to the Forum; Technical Memorandum, Regional Impacts and related Water Forum briefing and presentation.

Project Alternatives Development and Evaluation

This work element includes four tasks:

- Develop Project Submittal and Review Process
- Preliminary Project Identification, Evaluation and Integration
- Develop Stormwater and Flood Management Program and Project Concepts
- Review and Evaluate Results of Call for Detailed Projects

11. Develop Project Submittal and Review Process

The submittal and review process will be impartial, transparent and fair. The purpose of this task is to develop and coordinate the process for project submittal; establish review and evaluation criteria; develop an approach to updating and amending the Imperial IRWMP and for maintaining and amending a list of project so the Imperial IRWMP is flexible and responsive to evolving circumstances and changing funding opportunities.

In order to evaluate how individual or groups of projects and/or management actions could perform in the future, individual project characteristics must be described in a similar level of detail so review and evaluation criteria may be fairly applied to compare the

"While the specific review process is up to each RWMG to develop and document in their IRWM Plan, the process must include three components:

- (1) Procedures for submitting a project to the IRWM Plan
- (2) Procedures for review of projects to implement the IRWM Plan
- (3) Procedure for communicating the list(s) of selected projects"

CDWR Standards (page 47)

relative performance. Templates to normalize the submittal will be defined. This task will include the first call for project and development of a preliminary list of project concepts that can be integrated and to identify which project need additional work.

The intent of Imperial IRWMP is to define projects and programs priorities that solve regional water management problems and meet other IRWMP goals and objectives. It is also to help obtain grants. The process for reviewing and prioritizing projects needs to be designed both to meet the Imperial IRWMP mission, goals and objective (long-term) and to realize Proposition 84 funding opportunities (near-term). As such, the IRWMP needs a process for developing and maintaining a list of projects that meet the goals and objectives. This project list can be maintained separately as an addendum to the IRWMP, and can be updated on an ongoing or periodic basis. Then, when grant funding opportunities arises from any source, the list can be evaluated against grant specific criteria.

- Develop Water Forum Briefing on CDWR Project Submittal and Review. The standards will be summarized in a short written briefing and presentation to the Water Forum. The basis and assumptions for the submittal and review process will be established.
- 11.2. Develop Draft Review and Evaluation Criteria. Program Consulting Team will present the review and evaluation, ranking, and prioritization criteria used in the *Draft IID Plan* (Vol. 2, Appendix K) to the Water Forum for review and comment. Program Consultant will work with the Project Work Group to finalize the IRWMP project review and evaluation criteria based on Water Forum input, Imperial IRWMP goals and objectives, and requirements in the CDWR

guidelines. The IRWMP review and evaluation criteria will serve as performance measures and provide a method to compare the relative success of the alternative project solutions for producing the desired result.

11.3. Develop Draft Project Submittal and Review Process and Schedule. The process will define who is to be involved, method and information to be submitted, process and requirements.

Program Consultant will prepare draft evaluation and ranking criteria which will include two levels of project evaluation. The first level will support a preliminary screening of projects based primarily on how well they meet the IRWMP regional goals and objectives, apply and integrate the RMS selected for the Imperial Region, project status (readiness-to-proceed), defined costs and financing, and strategic considerations such as whether a project provides multiple benefits, includes multiple participants, etc. Projects will be categorized as Regional or DAC Critical Water Supply/Quality, or whether they would meet both objectives.

The second level of evaluation and ranking will apply the criteria more rigorously and be based on more detailed project submittals and the Proposition 84 Implementation Grant Proposal Solicitation Package. Some prioritization factors that CDWR requires be included are: project cost and financing, economic feasibility, impacts and benefits, benefits to critical DAC water issues, contribution of the project to adapt to climate change, and contribution of the project in reducing GHG emissions as compared to other project alternatives. The Water Forum may opt to include other criteria specific to the Imperial Region (e.g., urgency for the project, safety concerns or financial penalty).

Water Forum input will be used to develop the final submittal and review process. It is anticipated that some technical review of stakeholder projects would be conducted by the Program Consulting Team (e.g., GHG emissions, climate change, environmental; permitability, CEQA readiness, etc.); and that some would be conducted with the input of the Project Work Group. Based on the revised Proposition 84 Implementation Grant schedule, we will develop the project submittal and review schedule for the Imperial IRWMP. The Round 3 submittal deadline will serve as the critical path (assumption is that the region will forego Round 2 and pursue funding for Round 3). The review process and schedule will be clearly communicated to the stakeholders and public.

- 11.4. Project Work Group Meeting, Review Criteria and Process. The project submittal and review process, and the review and evaluation criteria will be reviewed and revised with input from the Project Work Group and presented to the Water Forum for final acceptance.
- 11.5. Develop Final Draft Review and Evaluation Criteria. Based on work group and Water Forum input, final ranking and evaluation criteria will be prepared. This includes confirming the process and participants to be included in the review.

<u>Deliverable</u>: Project submittal and review process; specific Imperial IRWMP and Proposition 84 project ranking and evaluation criteria, Critical Path Schedule for Proposition 84 Implementation Grant Round 3.

11.6. Develop project templates and forms. This will allow applicants to submit project information in standard formats which will make it easier to aggregate and review information and apply the ranking and evaluation criteria.

Deliverable: Project Submittal Forms.

- 11.7. First Call for Projects/Compile Preliminary List of Projects. Program Consultant will support the Water Forum in making a preliminary call for project to add to the identified during the scoping, review of RMS, and DAC outreach and needs analysis. Program Consultant will compile a preliminary list of potential stakeholder project.
- 11.8. Develop Process/Criteria to Amend IRWMP and Maintain IRWMP Project List. Program Consultant will define process to be included in the IRWMP to formally amend the IRWMP as part of the Imperial Region's adaptive management strategy and to accommodate evolving state requirements. The process for amending the IRWMP will be established and documented in the IRWMP Implementation Plan, including how the Water Forum will update and maintain a project list. This process and criteria to get on the project list, update a project on the existing list, and prioritize the project list is what would be developed and memorialized in the IRWMP.

<u>Deliverables</u>: Develop Process/Criteria to Amend IRWMP and Maintain IRWMP Project List; consider and adopt specific grant criteria.

12. Preliminary Project Evaluation to Develop and Integrate Regional and Stakeholdersponsored Capital Projects Alternatives

The purpose of this task is to review the Preliminary Project List; apply first stage ranking criteria; define opportunities to integrate projects into regional alternatives; and support local projects sponsors, including disadvantaged communities, in identifying next steps to make projects 'grant ready'. The purpose is not to screen or eliminate a project from being included in the Imperial IRWMP, but to begin to integrate individual projects into the regional planning context, set near-, mid- and longer-term priorities; define and manage expectations about the level of detail and costs needed to be 'grant ready' and make the Imperial Region competitive for implementation grant funding.

- 12.1. Presentation/ Briefing on Regional Project Concepts. The presentation will review local stakeholder-sponsored projects and identified needs of DACs (Task 7) and present existing regional projects identified in the *Draft IID Plan* (Vol. 2, Appendix N). The information will be used to facilitate Water Forum discussion of how to develop regional project options, interrelations among project elements, and opportunities for project integration to better meet IRWMP goals and objectives and funding criteria.
- 12.2. Coordinate Project Work Group. At least three onsite meetings and three conference calls will be needed to review the material and obtain work group input, which will be summarized and

- presented to the Water Forum. Program Consultant will work with the Project Work Group to review the responses to the First Call for Projects.
- 12.3. Review Preliminary List of Projects, Apply First Level Criteria. Program Consultant will support Project Work Group review and application of the First Level Criteria and development of a prioritized project list.
- 12.4. Refine Regional Project Alternatives for Near- and Longer-Term Development. Program Consulting Team and Project Work Group will review the Preliminary List to define need for additional engineering; identify opportunities for near- term and longer-term development; combine or integrate projects to better meet Imperial IRWMP goals and objectives and State funding criteria; and/or discuss partnership opportunities. First level screening results will be compiled along with documentation of Project Work Group deliberations for presentation to the Water Forum. Recommendations for additional data and further analyses required to implement long-term solutions will be identified. Steps required to develop a comprehensive water management strategy implementing the best alternatives will be presented to the Water Forum.

This task includes regional project formulation and development, including descriptions of proposed facilities, capital and O&M cost, identification of customers and quantification of anticipated water deliveries. Project costs will be presented as revenue requirements to allow further economic analysis. Development will start with projects identified in the *Draft IID Plan*. It is anticipated that other stakeholders will have additional projects to propose. Individual projects will be grouped into proposed programs to increase or redirect water supplies within the IID service area. These programs will be compiled based on least cost, readiness and ability to implement and stakeholder input.

12.5. Coordinate Water Forum Review of the Project Priority List. Program Consultant will coordinate presentation of the first level screening to the Water Forum for action. The list will provide the basis for regional project strategies to be included in the IRWMP to meet IRWMP goals and objectives, and projects that will be the basis for developing more detailed project descriptions that are ready to be included in an Implementation Grant application.

Deliverable: Preliminary List of Project from First Level Review

- 12.6. Coordination and Technical Support to Project Proponents.
- 12.7. Coordinate Call for Detailed Project Descriptions. Program Consultant will coordinate the call for project stakeholders to develop and submit the more detailed project descriptions required by Proposition 84, including providing consulting support regarding CDWR requirements.

13. Develop Stormwater and Flood Management Program and Project Concepts

The purpose of this task is to conduct a needs assessment for the purposes of stormwater management and flood control infrastructure along with the evaluation of the potential for stormwater capture. The Program Consultant will collect data and document current infrastructure and management plans; define the local and regional flood protection issues, develop stormwater management infrastructure concepts, and develop a priority ranking of projects for further planning and implementation; investigate funding options and needs; and to review and recommend appropriate policies to protect life and property.

Imperial County has an average annual rainfall of approximately three inches, but at times experiences short-duration, high-intensity storm patterns. When these types of storm patterns occur, the Imperial Region is exposed to both local and regional flooding. The flooding is generally due to the lack of dedicated storm drainage infrastructure within the urbanized area and the lack of dedicated regional flood control facilities within the alluvial plains and low lands adjacent to the New and Alamo rivers. Currently, the County of Imperial has a complete Flood Ordinance that provides direction for new development and redevelopment within the region. It appears that none of the cities or outlying areas has prepared a Drainage Master Plan addressing local flooding. The general approach to addressing drainage associated with new development is to provide for on-site retention with a pre-development discharge rate limitation into the existing agriculture drainage infrastructure operated by IID.

13.1. Regional Flood Planning.

- 13.1.1. Convene and Coordinate Flood Work Group Meetings. The Program Consultant Team will organize and implement Flood Work Group meetings to gather information regarding facilities' operational parameters and identify existing constraints, limitation and issues regarding deficiencies within the overall flood control system. This effort will be conducted in a tiered fashion as described above first starting with the regional entities and then followed by the local cities and other project stakeholders. The Flood Work Group meetings will consist of convening and coordinating two meeting with the specific focus on addressing regional flood control issues. The specific areas of interest will include:
 - Regional flooding and drainage issues
 - Operational parameters and limitations of the IID agriculture drainage features
 - Operational parameters and limitations of the New River and Alamo River drainage features
 - Review existing drainage policies presented by both the County of Imperial and IID.
 - Review of Floodplain Development Policies and document coordination efforts between the incorporated Cities and the unincorporated portions of the County.

<u>Deliverables</u>: Two (2) Flood Work Group meetings, Briefing Materials, Agendas, and Meeting Notes; Summary Technical Memorandum of meeting proceedings, ready for distribution to the Flood Work Group members.

- 13.1.2. Regional Flood Control Planning/Existing Information Research and Gathering This task will consist of obtaining existing information from area stakeholders that includes but not limited to the following:
 - Obtain existing General Plan/Land use Assumptions utilized to establish stormwater runoff rates and volumes
 - Existing drainage master plans regarding regional flood control facilities
 - Existing as-built plans for drainage facilities tributary to the New and Alamo rivers
 - Existing as-built plans for agriculture drainage facilities owned and operated by IID
 - Any existing hydrology/hydraulic analyses to develop a baseline of existing capacities within existing regional drainage facilities
 - Research existing stormwater quality mitigation measures being implemented to satisfy the requirements of the NPDES discharge permits
 - Document existing hydromodification (erosion) associated with erosion or continued degradation of the storm channels, and natural river systems (New and Alamo rivers).

<u>Deliverables</u>: Bibliography, database of reports, Index of as-built plans, Needs and Gaps Summary, policies.

- 13.1.3. Regional Flood Control Existing Condition Assessment Based on initial information gathering efforts, the Program Consulting Team will reconvene Flood Work Group Flood Work Group meetings to further refine existing flooding issues and document specific locations of interest that would be considered as a priority project location for regional flood protection. The Regional Flood Control Existing Condition Assessment task will include the following specific subtasks:
 - Organize and implement two Flood Work Group meetings to identify legacy drainage and flooding issues associated with the existing flood control system.
 Document stakeholder concerns, issues, and operational constraints limiting the ability of providing adequate flood protection.
 - With input from the Flood Work Group FLOOD WORK GROUP, develop a matrix of
 potential improvement and/or corrective measure addressing the legacy drainage
 and flooding issues identified as part of this effort.
 - Identify compliance issues with the existing County of Imperial Flood Ordinances.
 Review existing floodway/floodplain development and document potential corrective issues. If required, develop preliminary revisions to the existing County Flood Ordinances limiting or establishing development guidelines within the region.

<u>Deliverables</u>: Technical Memorandum as outlined above; Agendas, Meeting Minutes, and other documentation identified as part of Regional Flood Control Existing Condition Assessment.

- 13.1.4. Regional Flood Control Needs Analysis Upon the completion of the initial information and project deficiencies identification process, the Program Consulting Team will review and establish a priority listing of potential implementation projects. The effort will include the preliminary development of graphical representation of project solutions that resolve capacity and operational issues. Preliminary engineering and construction costs will be established for each project along with potential mitigation measures required for implementation. It is anticipated that the majority of the regional drainage issues will focus on floodplain issues identified in the southwestern portions of the County of Imperial, IID agriculture drainage facilities and the New and Alamo river systems pertaining to capacity constraints and hydromodification (erosion) issues.
 - Based on the preliminary matrix of future facilities needs and implementation strategies, as developed under prior tasks, the Program Consulting Team will refine the project concepts, establishing preliminary project geometry; facility elements including materials; probable construction costs, preliminary listing of potential environmental constraints and mitigations; and a graphical schematic representing project limits and requirements.
 - Reconvene the Flood Work Group to finalize the priority listing the proposed regional drainage solutions and establish the need for implementation.
 Collaboratively develop any required regulatory revisions to the County Flood Ordinance and establish operational parameters for the use of IID agriculture drainage facilities.
 - Develop a Planning Conclusion and Recommendations section addressing regional flood issues to be included in the Final IRWMP.

<u>Deliverables:</u> Technical Memorandum identifying regional drainage deficiencies; preliminary assessment of drainage needs; document existing land use assumptions to verify facilities capacities; preliminary matrix of future facility needs and implementation strategies based on the Flood Work Group recommendations and conclusions.

13.2. Local Drainage Planning.

13.2.1. Convene and Coordinate Drainage Work Group Meetings – The Program Consulting Team will organize and implement Drainage Work Group meeting to gather information regarding local drainage facilities, existing local flooding issues, documentation of local property damage due to flooding; identify existing constraints, limitations and issues regarding deficiencies within the overall local drainage system. Drainage Work Group meetings will consist of convening and coordinating two

meeting with the specific focus on addressing regional flood control issues. The specific areas of interest will include:

- Identifying Local Flooding and Drainage Issue
- Coordination requirements and limitations for the use of the IID agriculture drainage features providing local outfall points of the storm drain systems
- Permitting and operational limitations for the use of the New and Alamo Rivers providing local outfall points of the storm drain systems
- NPDES compliance issues and existing Storm Water Quality Programs within the local entities
- Review of existing drainage policies presented by both the County of Imperial and the IID and how they affect the drainage facilities on a local level
- Review of Floodplain Development Policies and document inconsistencies between the incorporated Cities and the unincorporated portions of the County of Imperial
- 13.2.2. Local Drainage and Flood Control Planning. Existing Information Research and Gathering This task will consist of existing information gathering from the local area Stakeholders (Cities) that includes but not limited to the following:
 - Obtain existing General Plan/Land Use assumptions utilized to establish stormwater runoff rates and volumes
 - Document existing Storm Water Quality Mitigation Measures and review the existing development requirements for the compliance with the General Permit
 - Existing drainage master plans regarding local drainage facilities
 - Existing as-built plans for drainage facilities within urbanized areas and facilities providing local drainage
 - Any existing hydrology/hydraulic analyses to develop a baseline of existing capacities within the existing local drainage facilities

<u>Deliverables:</u> Bibliography, database of reports, Indexing of obtained as-built plans, Needs and Gaps Summary, policies.

- 13.2.3. Local Flood Control Existing Condition Assessment Upon the initial information gathering efforts, the consultant team will reconvene the Flood Work Group to further refine existing local flooding issues and document specific locations of interest that would be considered as a priority project location for improved local drainage facilities. The Local Flood Control Existing condition Assessment task will include the following specific subtasks:
 - Organize and implement conjoint meeting of Flood and Drainage work groups meetings to identifying legacy drainage and flooding issues associated with the existing urbanized drainage system. Document stakeholder concerns, issues, and operational constraints limiting the ability of providing adequate flood protection.

- With input from the work groups, develop a matrix of potential improvement and/or corrective measure addressing the legacy drainage and flooding issues identified as part of this effort.
- Identify compliance issues with the existing County Flood Ordinances. Review existing floodway/floodplain development and document potential corrective issues. If required, develop preliminary revisions to the existing County Flood Ordinances limiting or establishing development guidelines within the region.

<u>Deliverables</u>: Technical Memorandum as outlined above; Agendas, Meeting Minutes, and other documentation identified as part of Local Flood Control Existing Condition Assessment.

13.2.4. Local Flood Control Needs Analysis - Upon the completion of the initial information and project deficiencies identification process, the project team will review and establish a priority listing of potential implementation projects. The effort will include the preliminary development of graphical representation of the project solutions that resolve capacity and operational issues. Preliminary engineering and construction costs will be established for each project along with potential mitigation measures required for implementation. It is anticipated that the majority of the local drainage issues will focus on inadequate storm drainage facilities issues identified in urbanized areas of the County.

<u>Deliverables</u>: Technical Memorandum identifying the existing regional drainage deficiencies, preliminary assessment of drainage needs, document existing land use assumptions to verify facilities capacities and a preliminary matrix of future facility needs and implementation strategies based on the stakeholder recommendations and conclusions.

13.3. Sustainable Design Planning (Stormwater Capture and Reuse) - Sustainable Design Planning – Program Consulting Team will work with the local stakeholders (Incorporated Cities) to investigate the potential of implementing a Low Impact Develop (LID) conceptual design guideline. This task will focus on the development and acceptance of LID measures specifically targeted at detaining and infiltrating the first flush storm event. If LID concepts appear to be unfeasible, no additional effort will be expended on the development of these concepts, otherwise, specific measures will be further refined to identify the potential of captured runoff for infiltration purposes.

<u>Deliverables</u>: Technical Memorandum evaluating the merits of LID concepts in an Arid Region; Agendas, Meeting Minutes, and other documentation supporting the conclusions and recommendations of local stakeholders.

13.4. Project Identification/Preliminary Cost Analyses – Program Consulting Team will develop an overall listing the projects identified by both the Flood and Drainage work groups. Prior the developing the final priority project rankings, the work groups will develop screening and project criteria in an effort to identify potential projects that provide a regional benefit, increase flood protection at a reasonable costs to the highest number of people and select a

planning horizon for the implementation of the projects. Upon the completion of the ranking and criteria system, the entire Flood and Drainage work groups will reconvene together to prepare a final priority ranking the projects, refine preliminary cost estimates and develop a schedule of project implementation. The Consultant Team will prepare a draft element to be included as part of the proposed IRWMP for review acceptance by the Water Forum.

<u>Deliverables:</u> Briefing Materials; Project Ranking and Criteria Evaluations; Meeting Agendas, Meeting Minutes, Draft IRWMP section pertaining to Stormwater Management inclusive of all efforts presented within this Scope of Services.

13.5. Strategy & Implementation Summary – Program Consulting Team and members of the Policy Work Group will develop an implementation strategy that includes potential revising County of Imperial and Cities' ordinances, IID regulations and development of a preliminary funding plan. The funding plan will specifically identify avenues of grants, loans, federal Water Resources Development Act (WRDA) funding and USBR funding.

<u>Deliverables</u>: Strategy and Implementation sections to be included in the IRWMP; Briefing Materials; agendas, meeting notes.

14. Review and Evaluate Results of Call for Stakeholder Sponsored Projects

The purpose of this task is to apply the second level project review and evaluation criteria to the short list of projects that are competitive candidates for Proposition 84 Implementation Grant funding. When it is time to apply the evaluation and ranking criteria, we will work with the Projects Work Group to expedite the review. This task includes related technical evaluation of the projects needed to apply the review and evaluation criteria.

- 14.1. Coordinate Project Work Group project review and application of the Proposition 84 Review and Evaluation Criteria to the project list. Assumes two meetings and four teleconferences.
- 14.2. Apply second Level Screening Criteria. Program Consulting Team will support Project Work Group or ad hoc Project Review and Evaluation Work Group, which may be formed to avoid project proponents being screeners, to prepare a final prioritized list of projects for inclusion in Proposition 84 Implementation Grant Application for the Imperial Region. This includes incorporating the more detailed GHG Review and evaluation of technical feasibility, environmental justice, project cost and financing plan, impacts and benefits, economic feasibility and environmental compliance documents.
- 14.3. Aggregate Results.
- 14.4. Prepare summary of the review and project priority list.
- 14.5. Present Final List to Project Work Group for acceptance and to the Water Forum for Action and inclusion in the Updated IRWMP or future grant applications.

<u>Deliverables</u>: Individual Project Reviews; Review Results Summary; Updated Regional Project Priories for Proposition 84 Round 2 funding application.

Develop Non- Structural, Program and Policy Elements

This work element includes six tasks:

- Develop Plan Integration Strategy
- Apportionment Program
- Review and Develop Demand Management Elements and Alternatives
- Development of the Standards and Guidelines for Project Review
- Groundwater Management Plan Elements of the IRWMP
- Wetlands Mitigation Banking Program/Project

15. Develop Plan Integration Strategy

Conflicts in the Imperial Region revolve around the need to provide water for new projects, inconsistent interpretations of what water is available, disparity between the land use and water supply plans, and discontinuity in agency policies. The ability to integrate plans and avoid conflicts is to a large extent dependent on the definition of what water is to be made available for future users and new projects. The purpose of this task is to address these issues and create a conceptual framework for plan and policy integration to achieve consistency. CDWR standards require the IRWMP to evaluate both the relation to Local Water Planning and to Land Use Planning. The intent of both standards is to improve coordination between land and water agencies; achieve consistency between water and land use plans; avoid redundant efforts; and integrate decision process to reduce permitting costs to both the public agencies and project proponents, reduce decision time, and streamline the process.

The body of information produced as part of the *Draft IID Plan* include analysis of existing supplies (Vol. 2, Appendix C, Technical Memorandum 2.1), historical and forecasted demands (Vol. 2, Appendix D, Technical Memorandum 2.2); the IID Water Budget (Vol. 2, Appendix E); evaluation of related RMS (Vol. 2., Appendix A); and a Draft Policy Briefing on Integrating Water Supply and Land Use Planning in the *Draft IID Plan*. A series of briefings and presentations will be prepared for updated or existing *Draft IID Plan* materials will be used to facilitate dialog, obtain work group and Water Forum input and develop findings on which RMS are to be further developed and how the Imperial IRWMP will meet CDWR standards for integration and water supply and land use planning. The outcome is the consensus framework on how to integrate the IRWMP, UWMPs, Imperial County GWMP and the County and City General Plans. Opportunities for further development of policy, guidelines or standards and streamlined permit review and decision making will be identified. Tasks include:

15.1. Review and document current permit and planning process and issues. Examine how IID and County of Imperial and the Cities (land use planning agencies) currently communicate, and identify issues using specific examples. Collect and review IID comments on projects and City/County responses.

- 15.2. Prepare of Review of Current Process and Briefing on CDWR Standards and Plan Integration Concepts. Review and summarize CDWR standards, results of the review of current process (e.g., IRWMP, UWMPs, and GWMP) and integration opportunities. Briefing will be used to facilitate discussion with City and County planners through the Policy Work Group or an ad hoc work group and to develop the preliminary recommendations and policy framework, including next steps and actions to better integrate plans, interagency coordination, and streamline permitting and decision process.
- 15.3. Policy Work Group Meeting Plan Integration Issues/Opportunities. Review Integration Strategy Briefing, obtain input, and document meeting result, ideas and discussion points.
- 15.4. Prepare Draft Plan Integration Conceptual Land Use/Water Supply (LU/WS) Integration Framework and Permit Streamlining Strategy. This will be a technical memorandum outlining potential changes and opportunities to expedite the exchange of knowledge and expertise among land use and water resource managers; apply consistent policy and expedite decision process.
- 15.5. Policy Work Group Meeting, Review LU/WS Integration Framework. Review draft strategy, make refinements and provide direction for further developing policy alternatives and a strategy for inclusion in the IRWMP, make findings and recommendations to Water Forum.
- 15.6. Prepare Water Forum Briefing and Presentation LU/WS Integration Framework.
- 15.7. Prepare Final IRWMP LU/WS Integration Framework. The final technical memorandum will provide guidance on how to integrate UWMPs and the GWMP with the IRWMP; development of standards and guidelines for Water Supply Assessment information submittal and review requirements, and for interagency communications. The briefing is intended to aid the work group to make findings and recommendations related to the strategies and standards to the Water Forum and define next steps.

<u>Deliverables</u>: Briefing/Review of Current Process and Briefing on CDWR Standards and Plan Integration Concepts; Briefing/Presentation LU/WS Integration Framework; Draft and Final LU/WS Integration Framework and Permit Streamlining Strategy

16. Apportionment Program

The purpose of this task is to support to support the Policy Work Group and Water Forum during review of alternatives to apportion water within IID's annual cap of the 3.1 MAF. How to apportion exchange or otherwise manage internal transfer or allocate water within the IID service area among uses is a source of conflict and subject of ongoing controversy. If no new supplies are developed, a program and policies to apportion the available supply among between users would be necessary to provide the secure water supply needed to plan development and new projects. Any change in the place or type of water use would need to ensure that negative impacts to current users are mitigated. Program Consultants will support the Policy Work Group in reviewing apportionment alternatives, including those

previously considered by IID; evaluating impacts and benefits of apportionment; craft a conceptual framework for a program and for development of related polices; and develop draft and final approaches.

The existing body of information includes *Draft IID Plan* Chapter 9 which defined and key policy concepts for crafting and developing a program to manage the region's Colorado River water portfolio. This will be used to initiate discussion, identify issues and perspectives of the different water use communities and define the additional information needs of the group. The economic analysis and financial analysis in Task 10 will also be used to inform the process.

- 16.1. Define Decisions Cases/Scenarios. Examples within the decisions space will developed, documented and discussed with the work group (e.g., land use conversion from agricultural to municipal; industrial development on parcels with no irrigation history, accounting for in lieu use of Colorado River water through recycling, solar on areas outside of IID service area, etc.).
- 16.2. Policy Work Group Issues/Perspectives/Assumption. Program Consulting Team will work with the work group to achieve a clear definition of issues and assumptions, and to normalize the terminology. The boundaries of subsequent policy analysis, if any, will be identified.
- 16.3. Research Alternatives Policy and Programs. Program Consultant will conduct additional research on alternative program approaches, collect information, and summarize and compare the different strategies. This includes summary of prior IID programs. A briefing and information package will be prepared and provided to the work group for discussed and establish a policy framework.
- 16.4. Policy Work Group Policy and Program Alternatives, IID Programs. Two meetings and four additional conference calls are anticipated. Meeting notes document key discussion points, areas of consensus and disagreement, and decisions will be documented.
- 16.5. Develop Apportionment Policy Framework. From Policy Work Group input, Program Consultant will develop an apportionment policy framework and seek to obtain consensus. The policy framework, along with dissenting positions, will be documented and presented to the Water Forum for discussion. Potential next steps to develop policy will be identified.
- 16.6. Policy Work Group Meetings Policy Development. This is anticipated to take two meetings and six conference calls.
- 16.7. Prepare Final Apportionment Policy Framework. The final draft from the Policy Work Group will be presented to the Water Forum for review and comment, including the recommended approach and guidance to staff and the Program Consultant for developing the program and any needed policies.
- 16.8. Develop Draft Policy and Program. Program Consultant will coordinate with IID staff to develop draft and final policies and define the program, including staffing needs, roles and

- responsibilities and funding requirements. It is assumed that IID staff will take a large role in this task.
- 16.9. Policy Work Group Meetings Apportionment Policy and Program. This is anticipated to take two meetings and six conference calls.
- 16.10. Develop Final Apportionment Policy and Program. The final draft from the work group will be presented to the Water Forum for review and comment, including recommended approach and guidance to staff and Program Consultant for developing the program and any needed policies.

<u>Deliverables</u>: Work group Agendas, Meeting Notes/Results; Briefings, including Statement of Issues, Assumptions, Terms and Definitions; Define Decisions/Cases/Scenarios; Alternatives Policy and Programs; Draft and final Apportionment Policy Framework; Draft and final policy and program definition.

17. Review and Develop Demand Management Elements and Alternatives

The purpose of this task is to review and finalize the approach to demand management for municipal, commercial and industrial (MCI) water uses (non-agricultural). This will be accomplished through coordinated Water Forum and Demand Work Group review of the Demand Management RMS and Draft IID Plan Chapter 7, "Demand Management Elements and Alternatives". Anticipated outcomes are a list of planned MCI demand management actions, guiding principles for MCI demand management (e.g., Urban Water Council principles), and a description of an overall MCI demand management program approach. This includes roles, findings and recommendations. Each of the cities will be updating its Urban Water Management Plan, due July 11, 2011, pursuant to the Urban Water Management Planning Act (Division 6 Part 2.6 of the Water Code §10610 - 10656), which requires implementation of best management practices by urban purveyors, ¹⁰ and pursuant to the 2010 UWMP Guidebook requirements. It is important that MCI users reliant on Colorado River water demonstrate implementation of conservation measures and document reasonable beneficial use. Implementation status of local city UWMPs will be reviewed and summarized. Opportunities for a regional urban water management plan and for shared program development and implementation will be discussed and defined. The input will be used to update the existing Draft IID Plan Chapter 6, "Demand Management Alternatives."

- 17.1. Prepare UWMP and MCI Conservation presentations/briefing. Prepare presentation and briefing that describe IRWMP/UWMP requirements and related findings, recommendations, and conclusions from the IID Plan.
- 17.2. Coordinate MCI Water Conservation and Demand Management Work Group. It is assumed that there will be four meetings and an equal number of conference calls.

¹⁰ AB 1420 makes funding from State bond and grant programs contingent on urban purveyors' implementation of demand management measures and best management practices identified in a current, adopted UWMP.

- 17.3. Review current and municipal demand management measures and proposed practices. Program Consultant will work with the Demand Work Group to review existing UWMPs and schedule for 2010 updates, discuss requirements and opportunities to integrate UWMPs and the IRWMP, and opportunities for program integration, cost sharing and implementation. It is assumed that each city required to develop an UWMP is doing so and will be prepared to present and discuss their program.
- 17.4. Review Agricultural Water Management Program. (1 meeting) The work group will review and discuss IID's existing and planned levels of agricultural water management to develop an understanding of the program. It is assumed that IID will make a presentation to the work group documenting the current water conservation program and levels of investment. It is assumed that there will be no changes to the agricultural water conservation plan, and that the IID Definite Plan and Efficiency Conservation Plan are to be incorporated by reference into the Imperial IRWMP as the definitive strategy for the agricultural-use sector.
- 17.5. Review and Develop Urban Demand Management Measures and Alternatives. Distribute *Draft IID Plan* Chapter 7, "Demand Management" for review and comment and to initiate discussion. Use resources from CDWR, including landscape requirements, etc. (two meetings)
- 17.6. Review and Develop Renewable Energy Water Demands and Alternatives. This includes preparing a briefing on CEC requirements and work group review of *Draft IID Plan*, (Vol. 2, App. L Imperial Irrigation District Power Plant Water Use Evaluation (IEC, 9/2009)). Power company representatives will be provided the opportunity to make a presentation to the work group. Future opportunities and programs may be developed.
- 17.7. Develop Draft and Final Program Recommendations. Coordinate with the work group to prepare draft and final program recommendations, including defining roles and responsibilities, program time-lines and costs; and actions to be included in the Imperial Region Demand Management Program and Implementation Plan.

<u>Deliverables</u>: Work Group Briefings, meeting notes and presentations; Updated Demand Management Chapter for purposes of the Imperial IRWMP.

18. Development of the Standards and Guidelines for Project Review

The *Draft IID Plan* details IID's role and responsibilities in water and land use decisions, including state requirements for water supply assessments and verification of supplies; presents alternative policies for apportioning water; and provides policy guidelines for IID to use in making findings and recommendations. This information has not been widely reviewed. The IID Board adopted the Interim Water Supply Policy that provides water to new non-agricultural project development for the near term. The Imperial IRWMP planning process will provide community input to the IID Board as it considers alternative approaches to future water supply decision-making. It is assumed that prior to undertaking this effort, Plan Integration Strategy (Task 15), and the approach to the Apportionment Program (Task

16) will both be defined by the Policy Work Group and accepted by the Water Forum, otherwise this task cannot be completed.

- 18.1. Develop Draft Standards and Guidelines for Water Supply Assessment. This is envisioned to be a handbook that defines information to be submitted by project applicants as part of the land use permitting process in order to meet IID and the land use agency requirements. It would include a checklist of information to be submitted, related tables, templates or forms needed to be prepared as a complete package, which would expedite review by IID and the City/County land use agencies. State and local standards would be provided in appendices or as references with web links. The requirements and methods for evaluating pre-project and post-project water use will be defined, along with standards to submit a project water budget. Water conservation and demand management measures would need to be documented, and impact thresholds; analysis requirements; water duty factors to apply in developing the water budgets; and other information submittal requirements would be included.
- 18.2. Develop Review Process. Consultant will prepare flow chart of proposed decision process to be used to review the submitted information. A flow chart showing the current and proposed process will be generated for review with the work group. General guidelines for interpreting submitted information will be provided. This includes a check list to determine completeness, for making findings (e.g., consistent with UWMP, IRWMP, IID policies, etc.).
- 18.3. Develop sample findings. This would be draft of the action by the decision making entities.
- 18.4. Coordinate Demand Work Group Review. The draft will be provided to the work group for review and comment prior to going to the Water Forum. Comments, findings and recommendations will be documented. It is assumed that two meetings will be required for review.
- 18.5. Water Forum Briefing and Presentation WSA Guidelines and Standards. The document will be presented to the Water Forum for review and comment.
- 18.6. Prepare Final Standards and Guidelines for Water Supply Assessment

<u>Deliverables</u>: Draft and Final Standards and Guidelines for Water Supply Assessment; Water Forum Briefing and Presentation WSA Guidelines and Standards.

19. Groundwater Management Plan Elements of the IRWMP

Purpose of this task is to develop the Groundwater Management Plan (GWMP) elements for the IRWMP to meet state standards pursuant to the California Water Code (§10753.7). County of Imperial is responsible for groundwater management pursuant to County Ordinance but never developed a GWMP because of groundwater supply limitations related to poor water quality, low yield and limited existing or proposed development of the resource. The potential for groundwater banking in East Mesa and the likely presence of overdraft in West Mesa, along with legislative requirements to have a GWMP to pursue funding for groundwater projects provide the drivers for this activity. To meet state law, the

GWMP must include seven (7) mandatory components, and should review twelve (12) voluntary components and seven (7) suggested components identified in CDWR Bulletin 118. Most, but not all components will be met through the IRWMP. Overlap between the IRWP and GWMP requirements is large. Only activities needed to make the IRWMP compliant with GWMP requirements are included.

- 19.1. Update groundwater supply description. Collect West Mesa data. The supply/demand chapter of the IRWMP will be updated to summarize the available groundwater resources in West Mesa/Ocotillo Area. Existing information in the *Draft IID Plan* (Vol. 2, Appendix A) will also be summarized to East Mesa groundwater resources.
- 19.2. Develop Basin Management Objectives (BMOs) for East Mesa and West Mesa Area.
- 19.3. Develop and Adopt Groundwater Monitoring Protocols. Groundwater monitoring protocols are needed for the two areas and to comply GWMP requirements to track BMOs and for the recent state legislation (SB7X-6). This includes review and recommending updates to the monitoring portion of the ordinance and requirements on new wells.
- 19.4. Review and Develop the Voluntary Elements. The voluntary elements that will be reviewed to develop a description of existing programs and ordinance to identify opportunities to improve the ordinance or implement programs. This includes review of programs to control of saline water intrusion or migration; identify and manage well protection and recharge areas; regulate the migration of contaminated groundwater; administer well abandonment and destruction program, control and mitigate groundwater overdraft; replenish groundwater; develop and operate conjunctive use projects; identify well-construction policies; develop and operate groundwater contamination cleanup, recharge, storage, conservation, water recycling, and extraction projects; develop relationships with State and federal regulatory agencies; and review land use plans and coordinate with land use planning agencies to assess activities that create reasonable risk of groundwater contamination.
- 19.5. Develop GWMP Technical Memorandum. A Technical Memorandum will be prepared to documenting existing programs, describing how they relate to the Mandatory and Voluntary GWMP elements, County Ordinance, existing County Programs, the relationship to the IRWMP proposed projects activities; and reviewing opportunities to improve the programs. This would be reviewed by the County and then used to update sections of the IRWMP. BMOs for East and West Mesa will be included. Program actions and relation to the BMOs will be described. The draft Technical Memorandum will be provided to IID and the County for review and comment. A final Technical Memorandum would then be prepared to present to the Water Forum.
- 19.6. Present Technical Memorandum to the Water Forum. This will include review and acceptance of revised objectives for groundwater management.

19.7. Prepare GWMP sections of the IRWMP.

Deliverables: Draft of BMOs, Draft and Final Technical Memorandum, GWMP Elements

20. Wetlands Mitigation Banking Program/Project

The purpose of this task is to develop and document wetlands mitigation banking concepts and provide information on the elements and approach to developing a mitigation banking program. Recycling of wastewater could result in loss of flows to the regional drains and related negative habitat impacts. The negative impacts need to be mitigated as part of any effort to develop a recycled water program and appropriate mitigations need to be defined and factored into the project costs. IID operates the drains under an HCP/NCCP and has developed wetlands mitigation to support agricultural water conservation. Program Consulting Team will:

- 20.1. Review Current Programs. Review basis for prior impact/mitigation program requirements; the HCP/NCCP, IID's current wetlands mitigation program; contact or coordinate with IID staff and regulatory agencies.
- 20.2. Develop preliminary mitigation banking concepts, including basis for evaluating impacts and mitigations during project review, potential mitigation costs, and program components (next steps, policies needed, issues and opportunities, O&M requirements, permits, etc.) and develop mitigation banking concepts for the Imperial Region.
- 20.3. Prepare a Technical Memorandum, Wetlands Habitat Mitigation Banking Concepts for the Imperial Region. Document concepts, findings and recommendations for next steps. This includes a presentation and briefing to the Water Forum.

<u>Deliverables</u>: Draft and Final Technical Memorandum, Wetlands Habitat Mitigation Banking Concepts; Water Forum Presentation and Briefing.

Prepare IRWMP and Implementation Plan

The last work element is comprised of four tasks:

- Develop Mandatory IRWMP Elements
- Develop Imperial IRWMP Implementation Plan
- Prepare Draft and Final Imperial IRWMP
- Prepare Draft and Final Imperial IRWMP

21. Develop Mandatory IRWMP Elements

The purpose of this task is to ensure compliance with CDWR standards that not addressed in other parts of the IRWMP.

21.1. Plan Performance and Monitoring. This task develops a process and protocol to monitor IRWMP implementation. Review cycle will be defined. Water Forum stakeholders need to

know how the IRWMP is being implemented and how steps defined in the plan are being accomplished so they can continue or adjust the plan accordingly. The IRWMP process must not only develop a plan but also consider and determine a method of measuring the success of the plan and the plan's implementation. This task will include the development of metrics and procedures to measure at least the following: IRWPM objectives; stakeholder outreach and involvement; monitoring systems; and mechanisms to adjust implementation based on the data collected.

- 21.2. Data Management. Data collected and developed during the IRWMP process will be shared among participants and will be available to CDWR. As appropriate, data and reporting will be posted on the Imperial IRWMP Website. This task will include consolidation of existing data from Water Forum members and may include recommendations for data collection, quality control, reporting and analysis to be undertaken as an element of the implementation program. Program Consultant will employ a data system management specialist to prepare an appropriate method and platform to allow the Water Forum and stakeholders to access information compiled in the development of the IRWMP.
- 21.3. Coordination between Regions. Efforts and plans to coordinate with other water users in the Colorado River Hydrologic Region will be described. This includes defining opportunities for interregional cooperation.
- 21.4. Environmental Justice. A section will be prepared reviewing the overall IRWMP effect on DACs and underrepresented communities.
- 21.5. Long-Term Governance during Plan Implementation. This will include review and update of the Imperial IRWMP Water Forum and Regional Management Group Charter or other governance alternatives including potential formulation of a JPA. The governance model will be confirmed or amended.
- 21.6. Finance. This will include an update of funding opportunities, documentation of funding mechanisms to be employed based on the economic and fiscal analysis conducted in the technical studies, review of alternative approaches by the Policy Work Group, and the program for funding regional programs.

22. Develop Imperial IRWMP Implementation Plan

To meet state standards, the Imperial IRWMP must present regional priorities for implementation; identify short-term and long-term implementation priorities; and identify how decision-making will be responsive to regional changes, how responses to implementation of projects will be assessed, and how project sequencing may be altered as implementation is carried out. An implementation schedule will be developed, showing timelines for planned projects, other policy or programmatic actions or additional studies needed to solidify projects. This will include preferred funding and a financial strategy if consensus can be achieved and description of the long-term (through 2050) Imperial IRWMP for oversight and governance during Imperial IRWMP implementation. Results of the work will be used to

develop the final chapter of the Imperial IRWMP that will detail capital project priorities, demand management measures, and preferred policies for adoption by responsible agencies. Roles and responsibilities, schedules, and funding requirements will be identified. The final chapter will also include monitoring and reporting requirements, adaptive management strategies, and method for tracking progress.

- 22.1. Projects Actions and Schedule
- 22.2. Program Actions and Schedule

23. Prepare Administrative Draft, Public Draft and Final Draft Imperial IRWMP

The purpose of this task is to compile the previous work into a complete Imperial IRWMP that is ready for review and adoption. Ongoing and incremental review to update and build upon the chapters of the *Draft IID Plan* should allow for expedited preparation of an administrative draft Imperial IRWMP for review and comment by the Water Forum. Written comment will be sought and used to prepare a final public draft of the Imperial IWRMP. The Program Management Team will resolve conflicting comments. Where significant policy differences are implied by conflicting comments, these will be resolved by decision of the RWMG. At least one publicly noticed meeting of the Water Forum will be used to obtain public comment. Written and oral public comment will be recorded. The PMT will decide how public comment will be addressed and a final report will be prepared. A draft resolution will be prepared by the Program Consultant for consideration by each elected body. The resolution would be used to adopt a final Imperial Integrated Regional Water Management Plan.

- 23.1. Prepare Administrative Draft Imperial IRWMP
- 23.2. Coordinate Water Forum Review of Administrative Draft Imperial IRWMP. The Administrative Draft will be provided to the Water Forum representatives on CD in PDF format for review and written comment. The review period will be one month. It is assumed that each Water Forum representative will coordinate review within her or his organization, including briefing elected board members so that the comments reflect the view of their institution. Program Consultant will compile all written comments into a matrix, aggregating similar comments, and facilitate discussion by the PMT prior to review by the Water Forum. All written comments will be available to all Water Forum members on the Imperial IRWMP Web site.
- 23.3. Water Forum Meeting Review Administrative Draft and Stakeholder Comments. Written comments will be discussed and additional Water Forum oral comments will be recorded. It is suggested that this be a combined Water Forum/RWMG meeting.
- 23.4. Prepare Public Review Draft Imperial IRWMP. After the meeting, the PMT will review the written and oral comments from the meeting, reconcile comments, decide on changes to substance or findings and provide direction to the Consultant. As a result of prior coordination and decision-making processes, it is assumed that consensus will be achieved and that the RWMG will not need to resolve conflicts, and that extensive re-writes will not be

needed. Program Consultant will make revisions and edits to the Administrative Draft and prepare the Public Draft Imperial IRWMP to be provided to PMT on CD in PDF format. The PMT will be responsible for final review prior to public release and will then decide the timing for release the draft for public review and comment. The Public Review Draft will also be posted on the Imperial IRWMP Web site. IID will produce a limited number of hard copies to be placed in public libraries in the Imperial Region. It is assumed that it will take one month to work with the PMT to review and edit the Administrative Draft and prepare the Public Draft.

- 23.5. Public Comment Period. It assumed that the public review period will be three weeks, announced in the local newspaper with information as to where the public can view a copy (agency offices, local libraries, online), and stating the method for comment and date of the Water Forum public meeting. Written public comments will be compiled, a summary prepared and both will be provided the Water Forum prior to its meeting to review public comment.
- 23.6. Water Forum Meeting Review of Pubic Review Draft. This will be scheduled as a public meeting and will be a joint meeting of the Water Forum and RWMG to hear public comments on the Imperial IRWMP and will be duly noticed. Oral public comments will be documented and compiled into a summary.
- 23.7. Prepare Final Draft Imperial IRWMP. Program Consultant will work with the PMT to determine responses to comment, reconcile and issues and direct any changes or edits to the Public Review Draft. PMT will provide direction to the Program Consultant who will prepare the Final Draft IRWMP which will include copies of the written public comment and summary of the oral comment in an appendix. The Final Draft will be provided on CD in PDF format to be posted on the Imperial IRWMP Web site and circulated to Water Forum members and others who request a CD. Availability of the Final Draft Imperial IRWMP will be duly noticed pursuant to state law.

The Final Draft IRWMP will be circulated to the stakeholder groups for adoption. Once adopted by stakeholders, the Imperial IRWMP will be final. It is assumed that adoption by IID, County of Imperial and at least one City will result in the Final Imperial IRWMP for purposes of applying for Implementation Grant Funds. It is anticipated that within one month of receiving the Final Draft Imperial IRWMP, the governing boards will adopt it. The Final IRWMP will be submitted to the CDWR and SWRCB pursuant to the guidelines.